Inventor: Pierschbacher and Ruoslahti

Serial No.: 09/892,071

Page 2

Listing of the Claims

Claims 1-44 (canceled)

- 45. (previously presented) A method of inhibiting binding of a natural ligand to a vitronectin receptor comprising contacting said vitronectin receptor with a peptide containing the sequence Arg-Gly-Asp, said Arg-Gly-Asp sequence being conformationally restricted, thereby selectively inhibiting binding of said natural ligand to said vitronectin receptor with respect to the function of other receptors.
- 46. (previously presented) The method of claim 45, wherein said inhibition occurs in vivo.
- 47. (previously presented) A method of selectively inhibiting attachment of cells to vitronectin comprising providing to said cells in vitro a solution of a peptide containing the sequence Arg-Gly-Asp, said Arg-Gly-Asp sequence being conformationally restricted, thereby selectively inhibiting attachment of said cells to said vitronectin.
- 48. (previously presented) A method of selectively inhibiting attachment of cells to vitronectin comprising providing to said cells in vivo a solution of a peptide containing the sequence Arg-Gly-Asp, said Arg-Gly-Asp sequence being conformationally restricted, thereby

selectively inhibiting attachment of said cells to said vitronectin.

49. (previously presented) A method of selectively inhibiting binding of vitronectin receptor-containing cells to a substrate comprising providing to said cells in vitro a solution containing a peptide that encompasses the sequence Arg-Gly-Asp, said Arg-Gly-Asp sequence being conformationally restricted, thereby selectively inhibiting binding of said vitronectin receptor-containing cells to said substrate.

Inventor: Pierschbacher and Ruoslahti

Serial No.: 09/892,071

Page 3

- 50. (previously presented) A method of selectively inhibiting binding of vitronectin receptor-containing cells to a substrate comprising providing to said cells in vivo a solution containing a peptide that encompasses the sequence Arg-Gly-Asp, said Arg-Gly-Asp sequence being conformationally restricted, thereby selectively inhibiting binding of said vitronectin receptor-containing cells to said substrate.
- 51. (previously presented) A method of selectively inhibiting binding of vitronectin receptor-containing cells to a substrate comprising the steps of:
- a. providing to said cells in vitro a peptide containing the sequence Arg-Gly-Asp in solution, said Arg-Gly-Asp sequence being conformationally restricted; and
 - b. contacting said cells with said solution.
- 52. (previously presented) A method of selectively inhibiting binding of vitronectin receptor-containing cells to a substrate comprising the steps of:
- a. providing to said cells in vivo a peptide containing the sequence Arg-Gly-Asp in solution, said Arg-Gly-Asp sequence being conformationally restricted; and
 - b. contacting said cells with said solution.
- 53. (previously presented) A method of selectively inhibiting binding of cells to a substrate comprising providing to said cells in vitro a solution of a peptide containing an Arg-Gly-Asp sequence chemically modified with an additional chemical structure, wherein said additional chemical structure conformationally restricts the stereochemical structure of said Arg-Gly-Asp sequence in such a way that the affinity of the Arg-Gly-Asp binding site sequence for a particular receptor is enhanced.
- 54. (previously presented) A method of selectively inhibiting binding of cells to a substrate comprising providing to said cells in vivo a solution of a peptide containing an Arg-Gly-Asp sequence chemically modified with an additional chemical structure, wherein said

Inventor: Pierschbacher and Ruoslahti

Serial No.: 09/892,071

Page 4

additional chemical structure conformationally restricts the stereochemical structure of said Arg-

Gly-Asp sequence in such a way that the affinity of the Arg-Gly-Asp binding site sequence for a

particular receptor is enhanced.

55. (previously presented) The method of claim 45, wherein said peptide is a cyclic

peptide.

56. (previously presented) The method of claim 47, wherein said peptide is a cyclic

peptide.

57. (previously presented) The method of claim 48, wherein said peptide is a cyclic

peptide.

58. (previously presented) The method of claim 49, wherein said peptide is a cyclic

peptide.

59. (previously presented) The method of claim 50, wherein said peptide is a cyclic

peptide.

60. (previously presented) The method of claim 51, wherein said peptide is a cyclic

peptide.

61. (previously presented) The method of claim 52, wherein said peptide is a cyclic

peptide.